



RECEIVED
OCT 03 2001
TECH CENTER 1600/2900

7029.ST25.txt
SEQUENCE LISTING

- <110> ~~DURELL~~ Pharmaceuticals Company
- <120> Use of the KCNQ2 and KCNQ3 Genes for the Discovery of Agents Useful in the Treatment of Neurological Disorders
- <130> DM-7029
- <140> US 09/454,868
- <141> 1999-12-03
- <150> US 60/110,804
- <151> 1998-12-03
- <160> 15
- <170> PatentIn version 3.0
- <210> 1
- <211> 3232
- <212> DNA
- <213> Homo sapiens
- <220>
- <221> Unsure
- <222> (3091)..(3091)
- <223> unkown
- <220>
- <221> Unsure
- <222> (3100)..(3100)
- <223> unkown
- <220>
- <221> Unsure
- <222> (3109)..(3109)
- <223> unkown
- <220>
- <221> Unsure
- <222> (3124)..(3124)
- <223> unkown
- <220>
- <221> Unsure
- <222> (3136)..(3136)
- <223> unkown

7029.ST25.txt

<220>
 <221> Unsure
 <222> (3148)..(3148)
 <223> unkown

<220>
 <221> Unsure
 <222> (3152)..(3152)
 <223> unkown

<400> 1
 gagtgcggaa ccgccgcctc ggccatgcgg ctcccggccg gggggcctgg gctggggccc
 60
 gcgcccggc ccgcgctccg cccccgctga gcctgagccc gaccgggggc gcctcccggc
 120
 aggcaccatg gtgcagaagt cgcgcaacgg cggcggtatac cccggcccga gcggggagaa
 180
 gaagctgaag gtgggcttcg tggggctgga ccccggcgcg cccgactcca cccgggacgg
 240
 ggcgctgctg atcgccggct ccgaggcccc caagcgcggc agcatcctca gcaaacctcg
 300
 cgcgggcggc gcggggcgccg ggaagcccc caagcgcaac gccttctacc gcaagctgca
 360
 gaatttcctc tacaacgtgc tggagcggcc gcgcggctgg gcgttcatct accacgccta
 420
 cgtgttcctc ctggttttct cctgcctcgt gctgtctgtg tttccacca tcaaggagta
 480
 tgagaagagc tcggaggggg ccctctacat cctggaaatc gtgactatcg tgggtgtttgg
 540
 cgtggagtac ttcgtgcgga tctgggcgcg aggcctgctgc tgccgggtacc gtggctggag
 600
 ggggcggctc aagtttgccc ggaaccggt ctgtgtgatt gacatcatgg tgctcatcgc
 660
 ctccattgcg gtgctggccg ccggctccca gggcaacgtc tttgccacat ctgcgctccg
 720
 gagcctgcgc ttctgcaga ttctgcggat gatccgcatg gaccggcggg gaggcacctg

780

gaagctgctg ggctctgtgg tctatgccca cagcaaggag ctggtcactg cctggtacat
840

cggcttcctt tgtctcatcc tggcctcggt cctggtgtac ttggcagaga agggggagaa
900

cgaccacttt gacacctacg cggatgcact ctggtggggc ctgatcacgc tgaccaccat
960

tggctacggg gacaagtacc cccagacctg gaacggcagg ctccttgctg caaccttcac
1020

cctcatcggt gtctccttct tcgctgtgcc tgcaggcatc ttgggggtctg ggtttgcct
1080

gaaggttcag gagcagcaca ggcagaagca ctttgagaag aggcggaacc cggcagcagg
1140

cctgatccag tcggcctgga gattctmcgc caccaacctc tcgctcacag acctgcactc
1200

cacgtggcag tactacgagc gaacggtcac cgtgccccatg tacagtctgc aaactcaaac
1260

ctacggggcc tccagactta tcccccgct gaaccagctg gagctgctga ggaacctcaa
1320

gagtaaactt ggactcgctt tcaggaagga cccccgcgcg gagccgtctc caagtaaagg
1380

cagcccgctc agagggcccc tgtgtggatg ctgccccgga cgctctagcc agaaggtcag
1440

tttgaaagat cgtgtcttct ccagcccccg aggcgtggct gccaaagggga aggggtcccc
1500

gcaggcccag actgtgaggc ggtcacccag cgccgaccag agcctcgagg acagccccag
1560

caaggtgccc aagagctgga gcttcgggga ccgcagccgg gcacgccagg ctttcgcgat
1620

caagggtgcc gcgtcacggc agaactcaga agaagcaagc ctccccggag aggacattgt
1680

ggatgacaag agctgcccct gcgagtttgt gaccgaggac ctgacccccg gcctcaaagt
1740

cagcatcaga gccgtgtgtg tcatgcgggt cctggtgtcc aagcggaagt tcaaggagag
1800

7029.ST25.txt

cctgcgggccc tacgacgtga tggacgtcat cgagcagtac tcagccggcc acctggacat
1860

gctgtcccga attaagagcc tgcagtccag agtggaccag atcgtggggc ggggcccagc
1920

gatcacggac aaggaccgca ccaagggccc ggccgaggcg gagctgcccg aggaccccag
1980

catgatggga cggctcggga aggtggagaa gcaggtcttg tccatggaga agaagctgga
2040

cttcctggtg aatatctaca tgcagcggat gggcatcccc ccgacagaga ccgaggccta
2100

ctttggggcc aaagagccgg agccggcgcc gccgtaccac agcccggaag acagccggga
2160

gcatgtcgac aggcacggct gcattgtcaa gatcgtgcgc tccagcagct ccacggggcca
2220

gaagaacttc tcggcgcccc cggccgcgcc cctgtccag tgtccgcct ccacctctg
2280

gcagccacag agccaccgc gccagggcca cggcacctcc cccgtggggg accacggctc
2340

cctggtgcgc atcccgccgc cgctgccca cgagcggtcg ctgtccgcct acggcggggg
2400

caaccgcgcc agcatggagt tcctgcggca ggaggacacc ccgggctgca ggcccccca
2460

ggggaacctg cgggacagcg acacgtccat ctccatcccg tccgtggacc acgaggagct
2520

ggagcgttcc ttcagcggct tcagcatctc ccagtccaag gagaacctgg atgctctcaa
2580

cagctgttac gcggccgtgg cgcttgtgc caaagtcagg ccctacattg cggagggaga
2640

gtcagacacc gactccgacc tctgtacccc gtgcggggccc ccgccacgct cggccaccgg
2700

cgaggggtccc tttggtgacg tgggctgggc cgggcccagg aagtgaggcg gcgctgggccc
2760

agtggacccg cccgcggccc tcctcagcac ggtgcctccg aggttttgag gcgggaaccc
2820

7029.ST25.txt

tctggggccc ttttcttaca gtaactgagt gtggcgggaa ggggtgggccc tggagggggcc
2880

catgtgggct gaaggatggg ggctcctggc agtgaccttt tacaaaagtt attttccaac
2940

aggggctgga gggctgggca gggcctgtgg ctccaggagc agcgtgcagg agcaaggctg
3000

ccctgtccac tctgctcaag gccgcggccg acatcagccc ggtgtgaaga ggggcggagt
3060

gatgacgggt gttgcaacct ggcaacaagc ngggggttgn ccagccganc caaggggaagc
3120

acanaaggaa gctgtncctt aagacctncc cnaaaggcgg cctgttttggc aagactgcgc
3180

cttgggtccg tgggttccg cagcaaaagc gggttttgcc gccctgtcg tg
3232

<210> 2
<211> 872
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (347)..(347)
<223> unknown

<400> 2

Met Val Gln Lys Ser Arg Asn Gly Gly Val Tyr Pro Gly Pro Ser Gly
1 5 10 15

Glu Lys Lys Leu Lys Val Gly Phe Val Gly Leu Asp Pro Gly Ala Pro
20 25 30

Asp Ser Thr Arg Asp Gly Ala Leu Leu Ile Ala Gly Ser Glu Ala Pro
35 40 45

Lys Arg Gly Ser Ile Leu Ser Lys Pro Arg Ala Gly Gly Ala Gly Ala
50 55 60

Gly Lys Pro Pro Lys Arg Asn Ala Phe Tyr Arg Lys Leu Gln Asn Phe
65 70 75 80

Leu Tyr Asn Val Leu Glu Arg Pro Arg Gly Trp Ala Phe Ile Tyr His
85 90 95

7029.ST25.txt

Ala	Tyr	Val	Phe	Leu	Leu	Val	Phe	Ser	Cys	Leu	Val	Leu	Ser	Val	Phe	
			100					105					110			
Ser	Thr	Ile	Lys	Glu	Tyr	Glu	Lys	Ser	Ser	Glu	Gly	Ala	Leu	Tyr	Ile	
		115					120					125				
Leu	Glu	Ile	Val	Thr	Ile	Val	Val	Phe	Gly	Val	Glu	Tyr	Phe	Val	Arg	
	130					135					140					
Ile	Trp	Ala	Ala	Gly	Cys	Cys	Cys	Arg	Tyr	Arg	Gly	Trp	Arg	Gly	Arg	
145					150					155					160	
Leu	Lys	Phe	Ala	Arg	Lys	Pro	Phe	Cys	Val	Ile	Asp	Ile	Met	Val	Leu	
				165					170					175		
Ile	Ala	Ser	Ile	Ala	Val	Leu	Ala	Ala	Gly	Ser	Gln	Gly	Asn	Val	Phe	
			180					185					190			
Ala	Thr	Ser	Ala	Leu	Arg	Ser	Leu	Arg	Phe	Leu	Gln	Ile	Leu	Arg	Met	
		195					200					205				
Ile	Arg	Met	Asp	Arg	Arg	Gly	Gly	Thr	Trp	Lys	Leu	Leu	Gly	Ser	Val	
	210					215					220					
Val	Tyr	Ala	His	Ser	Lys	Glu	Leu	Val	Thr	Ala	Trp	Tyr	Ile	Gly	Phe	
225					230					235					240	
Leu	Cys	Leu	Ile	Leu	Ala	Ser	Phe	Leu	Val	Tyr	Leu	Ala	Glu	Lys	Gly	
				245					250					255		
Glu	Asn	Asp	His	Phe	Asp	Thr	Tyr	Ala	Asp	Ala	Leu	Trp	Trp	Gly	Leu	
			260					265					270			
Ile	Thr	Leu	Thr	Thr	Ile	Gly	Tyr	Gly	Asp	Lys	Tyr	Pro	Gln	Thr	Trp	
		275					280					285				
Asn	Gly	Arg	Leu	Leu	Ala	Ala	Thr	Phe	Thr	Leu	Ile	Gly	Val	Ser	Phe	
	290					295					300					
Phe	Ala	Leu	Pro	Ala	Gly	Ile	Leu	Gly	Ser	Gly	Phe	Ala	Leu	Lys	Val	
305					310					315					320	
Gln	Glu	Gln	His	Arg	Gln	Lys	His	Phe	Glu	Lys	Arg	Arg	Asn	Pro	Ala	
				325					330					335		
Ala	Gly	Leu	Ile	Gln	Ser	Ala	Trp	Arg	Phe	Xaa	Ala	Thr	Asn	Leu	Ser	
			340					345					350			
Arg	Thr	Asp	Leu	His	Ser	Thr	Trp	Gln	Tyr	Tyr	Glu	Arg	Thr	Val	Thr	
		355					360					365				

7029.ST25.txt

Val	Pro	Met	Tyr	Ser	Ser	Gln	Thr	Gln	Thr	Tyr	Gly	Ala	Ser	Arg	Leu
370						375					380				
Ile	Pro	Pro	Leu	Asn	Gln	Leu	Glu	Leu	Leu	Arg	Asn	Leu	Lys	Ser	Lys
385					390					395					400
Ser	Gly	Leu	Ala	Phe	Arg	Lys	Asp	Pro	Pro	Pro	Glu	Pro	Ser	Pro	Ser
				405					410					415	
Lys	Gly	Ser	Pro	Cys	Arg	Gly	Pro	Leu	Cys	Gly	Cys	Cys	Pro	Gly	Arg
			420					425					430		
Ser	Ser	Gln	Lys	Val	Ser	Leu	Lys	Asp	Arg	Val	Phe	Ser	Ser	Pro	Arg
		435					440					445			
Gly	Val	Ala	Ala	Lys	Gly	Lys	Gly	Ser	Pro	Gln	Ala	Gln	Thr	Val	Arg
450						455					460				
Arg	Ser	Pro	Ser	Ala	Asp	Gln	Ser	Leu	Glu	Asp	Ser	Pro	Ser	Lys	Val
465					470					475					480
Pro	Lys	Ser	Trp	Ser	Phe	Gly	Asp	Arg	Ser	Arg	Ala	Arg	Gln	Ala	Phe
				485					490					495	
Arg	Ile	Lys	Gly	Ala	Ala	Ser	Arg	Gln	Asn	Ser	Glu	Glu	Ala	Ser	Leu
			500					505					510		
Pro	Gly	Glu	Asp	Ile	Val	Asp	Asp	Lys	Ser	Cys	Pro	Cys	Glu	Phe	Val
		515					520					525			
Thr	Glu	Asp	Leu	Thr	Pro	Gly	Leu	Lys	Val	Ser	Ile	Arg	Ala	Val	Cys
530						535					540				
Val	Met	Arg	Phe	Leu	Val	Ser	Lys	Arg	Lys	Phe	Lys	Glu	Ser	Leu	Arg
545					550					555					560
Pro	Tyr	Asp	Val	Met	Asp	Val	Ile	Glu	Gln	Tyr	Ser	Ala	Gly	His	Leu
				565					570					575	
Asp	Met	Leu	Ser	Arg	Ile	Lys	Ser	Leu	Gln	Ser	Arg	Val	Asp	Gln	Ile
			580					585					590		
Val	Gly	Arg	Gly	Pro	Ala	Ile	Thr	Asp	Lys	Asp	Arg	Thr	Lys	Gly	Pro
		595					600					605			
Ala	Glu	Ala	Glu	Leu	Pro	Glu	Asp	Pro	Ser	Met	Met	Gly	Arg	Leu	Gly
610						615					620				
Lys	Val	Glu	Lys	Gln	Val	Leu	Ser	Met	Glu	Lys	Lys	Leu	Asp	Phe	Leu
625					630					635					640
Val	Asn	Ile	Tyr	Met	Gln	Arg	Met	Gly	Ile	Pro	Pro	Thr	Glu	Thr	Glu

7029.ST25.txt

645										650					655				
Ala	Tyr	Phe	Gly	Ala	Lys	Glu	Pro	Glu	Pro	Ala	Pro	Pro	Tyr	His	Ser				
			660					665					670						
Pro	Glu	Asp	Ser	Arg	Glu	His	Val	Asp	Arg	His	Gly	Cys	Ile	Val	Lys				
		675					680					685							
Ile	Val	Arg	Ser	Ser	Ser	Ser	Thr	Gly	Gln	Lys	Asn	Phe	Ser	Ala	Pro				
	690					695					700								
Pro	Ala	Ala	Pro	Pro	Val	Gln	Cys	Pro	Pro	Ser	Thr	Ser	Trp	Gln	Pro				
705					710					715					720				
Gln	Ser	His	Pro	Arg	Gln	Gly	His	Gly	Thr	Ser	Pro	Val	Gly	Asp	His				
				725					730					735					
Gly	Ser	Leu	Val	Arg	Ile	Pro	Pro	Pro	Pro	Ala	His	Glu	Arg	Ser	Leu				
			740					745					750						
Ser	Ala	Tyr	Gly	Gly	Gly	Asn	Arg	Ala	Ser	Met	Glu	Phe	Leu	Arg	Gln				
		755					760					765							
Glu	Asp	Thr	Pro	Gly	Cys	Arg	Pro	Pro	Glu	Gly	Asn	Leu	Arg	Asp	Ser				
	770					775					780								
Asp	Thr	Ser	Ile	Ser	Ile	Pro	Ser	Val	Asp	His	Glu	Glu	Leu	Glu	Arg				
785					790					795					800				
Ser	Phe	Ser	Gly	Phe	Ser	Ile	Ser	Gln	Ser	Lys	Glu	Asn	Leu	Asp	Ala				
				805					810					815					
Leu	Asn	Ser	Cys	Tyr	Ala	Ala	Val	Ala	Pro	Cys	Ala	Lys	Val	Arg	Pro				
			820					825					830						
Tyr	Ile	Ala	Glu	Gly	Glu	Ser	Asp	Thr	Asp	Ser	Asp	Leu	Cys	Thr	Pro				
		835					840					845							
Cys	Gly	Pro	Pro	Pro	Arg	Ser	Ala	Thr	Gly	Glu	Gly	Pro	Phe	Gly	Asp				
	850					855					860								
Val	Gly	Trp	Ala	Gly	Pro	Arg	Lys												
865					870														

<210> 3
 <211> 842
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (347)..(347)

<223> unknown

<400> 3

Met	Val	Gln	Lys	Ser	Arg	Asn	Gly	Gly	Val	Tyr	Pro	Gly	Pro	Ser	Gly			
1				5					10					15				
Glu	Lys	Lys	Leu	Lys	Val	Gly	Phe	Val	Gly	Leu	Asp	Pro	Gly	Ala	Pro			
			20					25					30					
Asp	Ser	Thr	Arg	Asp	Gly	Ala	Leu	Leu	Ile	Ala	Gly	Ser	Glu	Ala	Pro			
		35					40					45						
Lys	Arg	Gly	Ser	Ile	Leu	Ser	Lys	Pro	Arg	Ala	Gly	Gly	Ala	Gly	Ala			
	50					55					60							
Gly	Lys	Pro	Pro	Lys	Arg	Asn	Ala	Phe	Tyr	Arg	Lys	Leu	Gln	Asn	Phe			
65					70				75						80			
Leu	Tyr	Asn	Val	Leu	Glu	Arg	Pro	Arg	Gly	Trp	Ala	Phe	Ile	Tyr	His			
				85					90					95				
Ala	Tyr	Val	Phe	Leu	Leu	Val	Phe	Ser	Cys	Leu	Val	Leu	Ser	Val	Phe			
			100					105					110					
Ser	Thr	Ile	Lys	Glu	Tyr	Glu	Lys	Ser	Ser	Glu	Gly	Ala	Leu	Tyr	Ile			
		115					120					125						
Leu	Glu	Ile	Val	Thr	Ile	Val	Val	Phe	Gly	Val	Glu	Tyr	Phe	Val	Arg			
	130					135					140							
Ile	Trp	Ala	Ala	Gly	Cys	Cys	Cys	Arg	Tyr	Arg	Gly	Trp	Arg	Gly	Arg			
145					150					155					160			
Leu	Lys	Phe	Ala	Arg	Lys	Pro	Phe	Cys	Val	Ile	Asp	Ile	Met	Val	Leu			
				165					170					175				
Ile	Ala	Ser	Ile	Ala	Val	Leu	Ala	Ala	Gly	Ser	Gln	Gly	Asn	Val	Phe			
			180					185					190					
Ala	Thr	Ser	Ala	Leu	Arg	Ser	Leu	Arg	Phe	Leu	Gln	Ile	Leu	Arg	Met			
		195					200					205						
Ile	Arg	Met	Asp	Arg	Arg	Gly	Gly	Thr	Trp	Lys	Leu	Leu	Gly	Ser	Val			
	210					215					220							
Val	Tyr	Ala	His	Ser	Lys	Glu	Leu	Val	Thr	Ala	Trp	Tyr	Ile	Gly	Phe			
225					230					235					240			
Leu	Cys	Leu	Ile	Leu	Ala	Ser	Phe	Leu	Val	Tyr	Leu	Ala	Glu	Lys	Gly			
				245					250					255				

7029.ST25.txt

Glu	Asn	Asp	His	Phe	Asp	Thr	Tyr	Ala	Asp	Ala	Leu	Trp	Trp	Gly	Leu			
			260					265					270					
Ile	Thr	Leu	Thr	Thr	Ile	Gly	Tyr	Gly	Asp	Lys	Tyr	Pro	Gln	Thr	Trp			
		275					280					285						
Asn	Gly	Arg	Leu	Leu	Ala	Ala	Thr	Phe	Thr	Leu	Ile	Gly	Val	Ser	Phe			
	290					295					300							
Phe	Ala	Leu	Pro	Ala	Gly	Ile	Leu	Gly	Ser	Gly	Phe	Ala	Leu	Lys	Val			
305					310					315					320			
Gln	Glu	Gln	His	Arg	Gln	Lys	His	Phe	Glu	Lys	Arg	Arg	Asn	Pro	Ala			
				325					330					335				
Ala	Gly	Leu	Ile	Gln	Ser	Ala	Trp	Arg	Phe	Xaa	Ala	Thr	Asn	Leu	Ser			
			340					345					350					
Arg	Thr	Asp	Leu	His	Ser	Thr	Trp	Gln	Tyr	Tyr	Glu	Arg	Thr	Val	Thr			
		355					360					365						
Val	Pro	Met	Tyr	Ser	Ser	Gln	Thr	Gln	Thr	Tyr	Gly	Ala	Ser	Arg	Leu			
	370					375					380							
Ile	Pro	Pro	Leu	Asn	Gln	Leu	Glu	Leu	Leu	Arg	Asn	Leu	Lys	Ser	Lys			
385					390					395					400			
Ser	Gly	Leu	Ala	Phe	Arg	Lys	Asp	Pro	Pro	Pro	Glu	Pro	Ser	Pro	Ser			
				405					410					415				
Pro	Arg	Gly	Val	Ala	Ala	Lys	Gly	Lys	Gly	Ser	Pro	Gln	Ala	Gln	Thr			
			420					425					430					
Val	Arg	Arg	Ser	Pro	Ser	Ala	Asp	Gln	Ser	Leu	Glu	Asp	Ser	Pro	Ser			
		435					440					445						
Lys	Val	Pro	Lys	Ser	Trp	Ser	Phe	Gly	Asp	Arg	Ser	Arg	Ala	Arg	Gln			
	450					455					460							
Ala	Phe	Arg	Ile	Lys	Gly	Ala	Ala	Ser	Arg	Gln	Asn	Ser	Glu	Glu	Ala			
465					470					475					480			
Ser	Leu	Pro	Gly	Glu	Asp	Ile	Val	Asp	Asp	Lys	Ser	Cys	Pro	Cys	Glu			
				485				490					495					
Phe	Val	Thr	Glu	Asp	Leu	Thr	Pro	Gly	Leu	Lys	Val	Ser	Ile	Arg	Ala			
			500					505					510					
Val	Cys	Val	Met	Arg	Phe	Leu	Val	Ser	Lys	Arg	Lys	Phe	Lys	Glu	Ser			
	515						520					525						

7029.ST25.txt

Leu	Arg	Pro	Tyr	Asp	Val	Met	Asp	Val	Ile	Glu	Gln	Tyr	Ser	Ala	Gly
530						535					540				
His	Leu	Asp	Met	Leu	Ser	Arg	Ile	Lys	Ser	Leu	Gln	Ser	Arg	Val	Asp
545					550					555					560
Gln	Ile	Val	Gly	Arg	Gly	Pro	Ala	Ile	Thr	Asp	Lys	Asp	Arg	Thr	Lys
				565					570					575	
Gly	Pro	Ala	Glu	Ala	Glu	Leu	Pro	Glu	Asp	Pro	Ser	Met	Met	Gly	Arg
			580					585					590		
Leu	Gly	Lys	Val	Glu	Lys	Gln	Val	Leu	Ser	Met	Glu	Lys	Lys	Leu	Asp
		595					600					605			
Phe	Leu	Val	Asn	Ile	Tyr	Met	Gln	Arg	Met	Gly	Ile	Pro	Pro	Thr	Glu
	610					615					620				
Thr	Glu	Ala	Tyr	Phe	Gly	Ala	Lys	Glu	Pro	Glu	Pro	Ala	Pro	Pro	Tyr
625					630					635					640
His	Ser	Pro	Glu	Asp	Ser	Arg	Glu	His	Val	Asp	Arg	His	Gly	Cys	Ile
				645					650					655	
Val	Lys	Ile	Val	Arg	Ser	Ser	Ser	Ser	Thr	Gly	Gln	Lys	Asn	Phe	Ser
			660					665					670		
Ala	Pro	Pro	Ala	Ala	Pro	Pro	Val	Gln	Cys	Pro	Pro	Ser	Thr	Ser	Trp
		675					680					685			
Gln	Pro	Gln	Ser	His	Pro	Arg	Gln	Gly	His	Gly	Thr	Ser	Pro	Val	Gly
	690					695					700				
Asp	His	Gly	Ser	Leu	Val	Arg	Ile	Pro	Pro	Pro	Pro	Ala	His	Glu	Arg
705					710					715					720
Ser	Leu	Ser	Ala	Tyr	Gly	Gly	Gly	Asn	Arg	Ala	Ser	Met	Glu	Phe	Leu
				725					730					735	
Arg	Gln	Glu	Asp	Thr	Pro	Gly	Cys	Arg	Pro	Pro	Glu	Gly	Asn	Leu	Arg
			740					745					750		
Asp	Ser	Asp	Thr	Ser	Ile	Ser	Ile	Pro	Ser	Val	Asp	His	Glu	Glu	Leu
		755					760					765			
Glu	Arg	Ser	Phe	Ser	Gly	Phe	Ser	Ile	Ser	Gln	Ser	Lys	Glu	Asn	Leu
	770					775					780				
Asp	Ala	Leu	Asn	Ser	Cys	Tyr	Ala	Ala	Val	Ala	Pro	Cys	Ala	Lys	Val
785					790					795					800
Arg	Pro	Tyr	Ile	Ala	Glu	Gly	Glu	Ser	Asp	Thr	Asp	Ser	Asp	Leu	Cys

7029.ST25.txt

805

810

815

Thr Pro Cys Gly Pro Pro Pro Arg Ser Ala Thr Gly Glu Gly Pro Phe
 820 825 830

Gly Asp Val Gly Trp Ala Gly Pro Arg Lys
 835 840

<210> 4
 <211> 2755
 <212> DNA
 <213> Homo sapiens

<400> 4
 ggcgacgtgg agcaagtcac cttggcgctc ggggccggag ccgacaaaga cgggaccctg
 60

ctgctggagg gcggcggccg cgacgagggg cagcggagga ccccgaggg catcgggctc
 120

ctggccaaga ccccgctgag ccgcccagtc aagagaaaca acgccaagta ccggcgcatc
 180

caaactttga tctacgacgc cctggagaga ccgcggggct gggcgctgct ttaccacgcg
 240

ttggtgttcc tgattgtcct ggggtgcttg attctggctg tcttgaccac attcaaggag
 300

tatgagactg tctcgggaga ctggcttctg ttactggaga catttgctat ttcatcttt
 360

ggagccgagt ttgctttgag gatctgggct gctggatggt gctgccgata caaaggctgg
 420

cggggccgac tgaagtttgc caggaagccc ctgtgcatgt tggacatctt tgtgctgatt
 480

gcctctgtgc cagtgggttgc tgtgggaaac caaggcaatg ttctggccac ctccctgcga
 540

agcctgcgct tcttgagat cctgcgcatg ctgcggatgg accggagagg tggcacctgg
 600

aagcttctgg gctcagccat ctgtgcccac agcaaagaac tcatcacggc ctggtacatc
 660

ggtttctga cactcatcct ttcttcattt cttgtctacc tggttgagaa agacgtccca
 720

gaggtggatg cacaaggaga ggagatgaaa gaggagtttg agacctatgc agatgccctg
 780

7029.ST25.txt

tgggtggggcc tgatcacact ggccaccatt ggctatggag acaagacacc caaaacgtgg
 840
 gaaggccgtc tgattgccgc caccttttcc ttaattggcg tctccttttt tgcccttcca
 900
 gcgggcatcc tgggggtccgg gctggccctc aagggtgcagg agcaacaccg tcagaagcac
 960
 tttgagaaaa ggaggaagcc agctgctgag ctcatcagg ctgcctggag gtattatgct
 1020
 accaacccca acaggattga cctgggtggcg acatggagat tttatgaatc agtcgtctct
 1080
 tttcctttct tcaggaaaga acagctggag gcagcatcca gccaaaagct ggggtctcttg
 1140
 gatcggggtc gccttttctaa tctctgtggg agcaatacta aaggaaagct atttaccct
 1200
 ctgaatgtag atgccataga agaaagtcct tctaaagaac caaagcctgt tggcttaaac
 1260
 aataaagagc gtttccgcac ggccttccgc atgaaagcct acgctttctg gcagagttct
 1320
 gaagatgccg ggacaggtga ccccatggcg gaagacaggg gctatgggaa tgacttcccc
 1380
 atcgaagaca tgatccccac cctgaaggcc gccatccgag cgcgcagaat tctacaattc
 1440
 cgtctctata aaaaaaaatt caaggagact ttgaggcctt acgatgtgaa ggatgtgatt
 1500
 gagcagtatt ctgccgggca tctcgacatg ctttccagga taaagtacct tcagacgaga
 1560
 atagatatga ttttcacccc tggacctccc tccacgcca aacacaagaa gtctcagaaa
 1620
 gggtcagcat tcaccttccc atcccagcaa tctcccagga atgaaccata tgtagccaga
 1680
 ccatccacat cagaaatcga agaccaaagc atgatgggga agtttgtaaa agttgaaaga
 1740
 caggttcagg acatggggaa gaagctggac ttctctgtgg atatgcacat gcaacacatg
 1800

7029.ST25.txt

gaacggttgc aggtgcaggt cacggagtat tacccaacca agggcacctc ctgcgcagct
1860

gaagcagaga agaaggagga caacaggtat tccgatttga aaaccatcat ctgcaactat
1920

tctgagacag gccccccgga accaccctac agcttccacc aggtgaccat tgacaaagtc
1980

agccccctatg gggttttttgc acatgaccct gtgaacctgc cccgagggggg acccagttct
2040

ggaaagggttc aggcaactcc tccttcctca gcaacaacgt atgtggagag gcccacggtc
2100

ctgcctatct tgactcttct cgactcccga gtgagctgcc actcccaggc tgacctgcag
2160

ggccccctact cggaccgaat ctccccccgg cagagacgta gcatcacgcg agacagtgac
2220

acacctctgt ccctgatgtc ggtcaaccac gaggagctgg agaggtctcc aagtggcttc
2280

agcatctccc aggacagaga tgattatgtg ttccggcccca atgggggggtc gagctggatg
2340

agggagaagc ggtacctcgc cgagggtgag acggacacag acacggaccc cttcacgccc
2400

agcggctcca tgcctctgtc gtccacaggg gatgggattt ctgattcagt atggaccct
2460

tccaataagc ccatttaaaa gaggtcactg gctgaccct ccttgtaatg tagacagact
2520

ttgtatagtt cacttactct tacacccgac gcttaccagc ggggacacca atggctgcat
2580

caaatgcatg cgtgtgcgtg gtggcccccac ccaggcaggg gcttcccaca gcctcttcct
2640

ccccatgtca ccacaacaaa gtgcttcctt ttcagcatgg tttgcatgac ttacactat
2700

ataaatggtt ccgctaattct cttctaggat aaaaaaaaaa aaaaaaaaaa aaaaa
2755

<210> 5
<211> 825
<212> PRT

<213> Homo sapiens

<400> 5

Gly	Asp	Val	Glu	Gln	Val	Thr	Leu	Ala	Leu	Gly	Ala	Gly	Ala	Asp	Lys	
1				5					10					15		
Asp	Gly	Thr	Leu	Leu	Leu	Glu	Gly	Gly	Gly	Arg	Asp	Glu	Gly	Gln	Arg	
			20					25					30			
Arg	Thr	Pro	Gln	Gly	Ile	Gly	Leu	Leu	Ala	Lys	Thr	Pro	Leu	Ser	Arg	
		35					40					45				
Pro	Val	Lys	Arg	Asn	Asn	Ala	Lys	Tyr	Arg	Arg	Ile	Gln	Thr	Leu	Ile	
	50					55					60					
Tyr	Asp	Ala	Leu	Glu	Arg	Pro	Arg	Gly	Trp	Ala	Leu	Leu	Tyr	His	Ala	
65					70				75						80	
Leu	Val	Phe	Leu	Ile	Val	Leu	Gly	Cys	Leu	Ile	Leu	Ala	Val	Leu	Thr	
				85					90					95		
Thr	Phe	Lys	Glu	Tyr	Glu	Thr	Val	Ser	Gly	Asp	Trp	Leu	Leu	Leu	Leu	
			100					105					110			
Glu	Thr	Phe	Ala	Ile	Phe	Ile	Phe	Gly	Ala	Glu	Phe	Ala	Leu	Arg	Ile	
		115					120					125				
Trp	Ala	Ala	Gly	Cys	Cys	Cys	Arg	Tyr	Lys	Gly	Trp	Arg	Gly	Arg	Leu	
	130					135					140					
Lys	Phe	Ala	Arg	Lys	Pro	Leu	Cys	Met	Leu	Asp	Ile	Phe	Val	Leu	Ile	
145					150					155					160	
Ala	Ser	Val	Pro	Val	Val	Ala	Val	Gly	Asn	Gln	Gly	Asn	Val	Leu	Ala	
				165					170					175		
Thr	Ser	Leu	Arg	Ser	Leu	Arg	Phe	Leu	Gln	Ile	Leu	Arg	Met	Leu	Arg	
			180					185					190			
Met	Asp	Arg	Arg	Gly	Gly	Thr	Trp	Lys	Leu	Leu	Gly	Ser	Ala	Ile	Cys	
		195					200					205				
Ala	His	Ser	Lys	Glu	Leu	Ile	Thr	Ala	Trp	Tyr	Ile	Gly	Phe	Leu	Thr	
	210					215					220					
Leu	Ile	Leu	Ser	Ser	Phe	Leu	Val	Tyr	Leu	Val	Glu	Lys	Asp	Val	Pro	
225					230					235					240	
Glu	Val	Asp	Ala	Gln	Gly	Glu	Glu	Met	Lys	Glu	Glu	Phe	Glu	Thr	Tyr	
				245					250					255		

7029.ST25.txt

Ala	Asp	Ala	Leu	Trp	Trp	Gly	Leu	Ile	Thr	Leu	Ala	Thr	Ile	Gly	Tyr		
			260					265					270				
Gly	Asp	Lys	Thr	Pro	Lys	Thr	Trp	Glu	Gly	Arg	Leu	Ile	Ala	Ala	Thr		
		275					280					285					
Phe	Ser	Leu	Ile	Gly	Val	Ser	Phe	Phe	Ala	Leu	Pro	Ala	Gly	Ile	Leu		
	290					295					300						
Gly	Ser	Gly	Leu	Ala	Leu	Lys	Val	Gln	Glu	Gln	His	Arg	Gln	Lys	His		
305					310					315					320		
Phe	Glu	Lys	Arg	Arg	Lys	Pro	Ala	Ala	Glu	Leu	Ile	Gln	Ala	Ala	Trp		
				325					330					335			
Arg	Tyr	Tyr	Ala	Thr	Asn	Pro	Asn	Arg	Ile	Asp	Leu	Val	Ala	Thr	Trp		
			340					345					350				
Arg	Phe	Tyr	Glu	Ser	Val	Val	Ser	Phe	Pro	Phe	Phe	Arg	Lys	Glu	Gln		
		355					360					365					
Leu	Glu	Ala	Ala	Ser	Ser	Gln	Lys	Leu	Gly	Leu	Leu	Asp	Arg	Val	Arg		
	370					375					380						
Leu	Ser	Asn	Pro	Arg	Gly	Ser	Asn	Thr	Lys	Gly	Lys	Leu	Phe	Thr	Pro		
385					390					395					400		
Leu	Asn	Val	Asp	Ala	Ile	Glu	Glu	Ser	Pro	Ser	Lys	Glu	Pro	Lys	Pro		
				405					410					415			
Val	Gly	Leu	Asn	Asn	Lys	Glu	Arg	Phe	Arg	Thr	Ala	Phe	Arg	Met	Lys		
			420					425					430				
Ala	Tyr	Ala	Phe	Trp	Gln	Ser	Ser	Glu	Asp	Ala	Gly	Thr	Gly	Asp	Pro		
		435					440					445					
Met	Ala	Glu	Asp	Arg	Gly	Tyr	Gly	Asn	Asp	Phe	Pro	Ile	Glu	Asp	Met		
	450				455						460						
Ile	Pro	Thr	Leu	Lys	Ala	Ala	Ile	Arg	Ala	Val	Arg	Ile	Leu	Gln	Phe		
465					470					475					480		
Arg	Leu	Tyr	Lys	Lys	Lys	Phe	Lys	Glu	Thr	Leu	Arg	Pro	Tyr	Asp	Val		
				485					490					495			
Lys	Asp	Val	Ile	Glu	Gln	Tyr	Ser	Ala	Gly	His	Leu	Asp	Met	Leu	Ser		
			500					505					510				
Arg	Ile	Lys	Tyr	Leu	Gln	Thr	Arg	Ile	Asp	Met	Ile	Phe	Thr	Pro	Gly		
		515					520					525					
Pro	Pro	Ser	Thr	Pro	Lys	His	Lys	Lys	Ser	Gln	Lys	Gly	Ser	Ala	Phe		

7029.ST25.txt

530					535					540					
Thr	Phe	Pro	Ser	Gln	Gln	Ser	Pro	Arg	Asn	Glu	Pro	Tyr	Val	Ala	Arg
545					550					555					560
Pro	Ser	Thr	Ser	Glu	Ile	Glu	Asp	Gln	Ser	Met	Met	Gly	Lys	Phe	Val
				565					570					575	
Lys	Val	Glu	Arg	Gln	Val	Gln	Asp	Met	Gly	Lys	Lys	Leu	Asp	Phe	Leu
			580					585					590		
Val	Asp	Met	His	Met	Gln	His	Met	Glu	Arg	Leu	Gln	Val	Gln	Val	Thr
		595					600					605			
Glu	Tyr	Tyr	Pro	Thr	Lys	Gly	Thr	Ser	Ser	Pro	Ala	Glu	Ala	Glu	Lys
	610					615					620				
Lys	Glu	Asp	Asn	Arg	Tyr	Ser	Asp	Leu	Lys	Thr	Ile	Ile	Cys	Asn	Tyr
625					630					635				640	
Ser	Glu	Thr	Gly	Pro	Pro	Glu	Pro	Pro	Tyr	Ser	Phe	His	Gln	Val	Thr
				645					650				655		
Ile	Asp	Lys	Val	Ser	Pro	Tyr	Gly	Phe	Phe	Ala	His	Asp	Pro	Val	Asn
			660					665					670		
Leu	Pro	Arg	Gly	Gly	Pro	Ser	Ser	Gly	Lys	Val	Gln	Ala	Thr	Pro	Pro
		675					680					685			
Ser	Ser	Ala	Thr	Thr	Tyr	Val	Glu	Arg	Pro	Thr	Val	Leu	Pro	Ile	Leu
	690					695					700				
Thr	Leu	Leu	Asp	Ser	Arg	Val	Ser	Cys	His	Ser	Gln	Ala	Asp	Leu	Gln
705					710					715				720	
Gly	Pro	Tyr	Ser	Asp	Arg	Ile	Ser	Pro	Arg	Gln	Arg	Arg	Ser	Ile	Thr
				725					730				735		
Arg	Asp	Ser	Asp	Thr	Pro	Leu	Ser	Leu	Met	Ser	Val	Asn	His	Glu	Glu
			740					745					750		
Leu	Glu	Arg	Ser	Pro	Ser	Gly	Phe	Ser	Ile	Ser	Gln	Asp	Arg	Asp	Asp
		755					760					765			
Tyr	Val	Phe	Gly	Pro	Asn	Gly	Gly	Ser	Ser	Trp	Met	Arg	Glu	Lys	Arg
	770					775					780				
Tyr	Leu	Ala	Glu	Gly	Glu	Thr	Asp	Thr	Asp	Thr	Asp	Pro	Phe	Thr	Pro
785					790					795				800	
Ser	Gly	Ser	Met	Pro	Leu	Ser	Ser	Thr	Gly	Asp	Gly	Ile	Ser	Asp	Ser
				805					810				815		

7029.ST25.txt

Val Trp Thr Pro Ser Asn Lys Pro Ile
 820 825

<210> 6
 <211> 2766
 <212> DNA
 <213> Rattus norvegicus

<400> 6
 tgactcccca tccgacctcc cctgcccccc gggaggcccg cctttgcctt cttttggggg
 60
 ggtgggcggg gaggggcgcg cggatcatgg cattggagtt cccgggcttg cagccgccgc
 120
 cgccgcctcg tccacgtacc ccaagcgctc cttcttcccc gagcagcagc ggagaaggcg
 180
 aagcgcccag tgggggcgag gcagatgggg ctcaaggctc gcagggcatc gggctcctgg
 240
 caaagacccc cctgagccgt ccagttaaga ggaacaacgc caagtacagg cgcattccaaa
 300
 ctttgatcta tgacgccctg gagagaccga ggggctgggc gctgctctac cacgcgcttg
 360
 tgttcctgat tgtcctggga tgcttgattc tggccgtgct caccactttc aaggagtatg
 420
 agactgtgtc tggagactgg cttttgctgc tggaaacatt tgctattttc atctttggag
 480
 ctgagtttgc tttgaggatc tgggctgcag gatgttgctg tcgatacaaa ggctggcgtg
 540
 gacggctgaa gtttgccagg aagcccctgt gcatgttgga tatcttcgtg ctgattgctt
 600
 ctgtgccagt ggttgccgtg ggaaaccagg gcaatgtcct ggctacctct ctgcgaagcc
 660
 tccgcttcct gcagatcctg cgcattgctc gaatggatag gaggggtggc acctggaagc
 720
 tcttgggctc agctatctgt gcccacagca aagaactcat caccgcctgg tacatcggct
 780
 tcttgacact catcctttct tcatttcttg tctacctggt ggagaaggat gtgccagaga
 840

7029.ST25.txt

tggatgcccc aggagaggaa atgaaagagg agtttgagac ctatgctgat gccctgtggt
900

ggggcctgat cacactggcc accattgggt atggagacaa gacacctaaa acctgggaag
960

gacgtctgat tgctgccacc ttttctttta tggcgctctc cttttttgct cttccggcag
1020

gcattccttg ctcaggactg gcattgaagg ttcaggaaca gcaccgtcag aagcactttg
1080

agaagagaag gaagccagct gctgaactca tccaggctgc ctggagatat tatgctacca
1140

accccaacag gcttgacctg gtggcaacct ggagatttta tgaatcagtt gtctctttcc
1200

cattcttcag gaaagaacaa ctggaagcag cagccagcca aaagctgggt ctcttggatc
1260

gggttcgcct ttctaactct cgtggtagca atactaaagg aaagctattt acccctctga
1320

atgtagatgc catagaagaa agcccttcca aagagccaaa gcccgttggc ttaaacaata
1380

aagagcgttt ccgcaccgcc ttccgcatga aagcctacgc tttctggcag agttctgaag
1440

atgccgggac aggagacccc atgacagaag acaggggcta tggaaatgac ttcctcattg
1500

aagacatgat ccccacccta aaggctgcca tccgagctgt cagaattcta caattccgtc
1560

tgtataaaaa aaaattcaag gagacattga ggccttatga tgtaaaagat gtaattgagc
1620

agtattccgc tggacatctt gacatgcttt ccaggataaa gtaccttcag acaagaatag
1680

atatgatttt cacccttgga cctccatcca ctccaaaaca taagaagtct cagaaagggg
1740

cagcatttac ctacccatcc cagcagtctc caaggaatga accatatgta gccagggcag
1800

ccacatcaga aactgaagac caaagcatga tggggaagtt tgtaaaagtt gaaagacagg
1860

ttcacgacat ggggaagaaa ctggacttcc tcgtggacat gcacatgcag catatggagc

1920

gtctgcaggt gcgcgtcacc gagtactacc caacaaaggg ggccctcctcc ccagcagaag
1980

gggagaagaa agaggacaac aggtattctg acttgaaaac catcatctgt aactactcag
2040

aatcaggccc ccccgaccca ccctacagct tccaccaggt gcccatcgac agagttggtc
2100

cctatggggtt ttttgcacat gaccccgtag aactgaccag aggggggaccc agttctacaa
2160

aggctcaggc caaccttccc tcctcgggaa gtacatatgc agagaggccc acagtcctgc
2220

ccatcttgac tcttctggac tcatgtgtga gctaccactc ccagacagaa ctgcaaggcc
2280

cctattcgga ccacatctca ccccgccaga gacgcagcat cactagggac agtgacacac
2340

cactgtccct catgtccgtc aaccacgagg aactggaacg gtctccaagt ggcttcagca
2400

tctcccaaga cagagatgat tatgtatttg gcccagtggt gggttcgagc tggatgaggg
2460

aaaagcggta cctggcagaa ggagaaacag acacagatac agacccttc acgcccagtg
2520

gatccatgcc tatgtcatct actggagatg gtatttcaga ttccatatgg accccttcca
2580

acaagcccac ttagaagggg tcaactggctg actcctggta ctgtagtcag actttgtaca
2640

gtcacttac tctcacatct agtgcttaac aatgaggact ccagtggctg tgtcaagcgc
2700

atgcatgtgc gcggtggccc ccctgcaagc aggggcttct cacagccttc ttctcccca
2760

tgtcac
2766

<210> 7
<211> 835
<212> PRT
<213> Rattus norvegicus

1 19 0 39

Met 1	Ala	Leu	Glu 5	Phe	Pro	Gly	Leu	Gln	Pro 10	Pro	Pro	Pro	Pro	Arg 15	Pro
Arg	Thr	Pro	Ser 20	Ala	Pro	Ser	Ser	Arg 25	Ser	Ser	Ser	Gly	Glu 30	Gly	Glu
Ala	Pro	Ser 35	Gly	Gly	Glu	Ala	Asp 40	Gly	Ala	Gln	Gly	Ser 45	Gln	Gly	Ile
Gly	Leu 50	Leu	Ala	Lys	Thr	Pro 55	Leu	Ser	Arg	Pro	Val 60	Lys	Arg	Asn	Asn
Ala 65	Lys	Tyr	Arg	Arg	Ile 70	Gln	Thr	Leu	Ile	Tyr 75	Asp	Ala	Leu	Glu	Arg 80
Pro	Arg	Gly	Trp	Ala 85	Leu	Leu	Tyr	His	Ala 90	Leu	Val	Phe	Leu	Ile 95	Val
Leu	Gly	Cys	Leu 100	Ile	Leu	Ala	Val	Leu 105	Thr	Thr	Phe	Lys	Glu 110	Tyr	Glu
Thr	Val	Ser 115	Gly	Asp	Trp	Leu 120	Leu	Leu	Leu	Glu	Thr	Phe 125	Ala	Ile	Phe
Ile	Phe 130	Gly	Ala	Glu	Phe	Ala 135	Leu	Arg	Ile	Trp	Ala 140	Ala	Gly	Cys	Cys
Cys 145	Arg	Tyr	Lys	Gly	Trp 150	Arg	Gly	Arg	Leu	Lys 155	Phe	Ala	Arg	Lys	Pro 160
Leu	Cys	Met	Leu	Asp 165	Ile	Phe	Val	Leu 170	Ile	Ala	Ser	Val	Pro	Val 175	Val
Ala	Val	Gly	Asn 180	Gln	Gly	Asn	Val	Leu 185	Ala	Thr	Ser	Leu	Arg 190	Ser	Leu
Arg	Phe	Leu 195	Gln	Ile	Leu	Arg	Met 200	Leu	Arg	Met	Asp 205	Arg	Arg	Gly	Gly
Thr	Trp 210	Lys	Leu	Leu	Gly	Ser 215	Ala	Ile	Cys	Ala	His 220	Ser	Lys	Glu	Leu
Ile 225	Thr	Ala	Trp	Tyr	Ile 230	Gly	Phe	Leu	Thr	Leu 235	Ile	Leu	Ser	Ser	Phe 240
Leu	Val	Tyr	Leu	Val 245	Glu	Lys	Asp	Val	Pro 250	Glu	Met	Asp	Ala	Gln 255	Gly
Glu	Glu	Met	Lys	Glu	Glu	Phe	Glu	Thr	Tyr	Ala	Asp	Ala	Leu	Trp	Trp

7029.ST25.txt

260							265					270				
Gly	Leu	Ile	Thr	Leu	Ala	Thr	Ile	Gly	Tyr	Gly	Asp	Lys	Thr	Pro	Lys	
		275					280					285				
Thr	Trp	Glu	Gly	Arg	Leu	Ile	Ala	Ala	Thr	Phe	Ser	Leu	Ile	Gly		
	290					295					300			Val		
Ser	Phe	Phe	Ala	Leu	Pro	Ala	Gly	Ile	Leu	Gly	Ser	Gly	Leu	Ala		
305					310					315				Leu		
Lys	Val	Gln	Glu	Gln	His	Arg	Gln	Lys	His	Phe	Glu	Lys	Arg	Arg		
				325					330				335	Lys		
Pro	Ala	Ala	Glu	Leu	Ile	Gln	Ala	Ala	Trp	Arg	Tyr	Tyr	Ala	Thr		
			340					345					350	Asn		
Pro	Asn	Arg	Leu	Asp	Leu	Val	Ala	Thr	Trp	Arg	Phe	Tyr	Glu	Ser		
		355					360					365		Val		
Val	Ser	Phe	Pro	Phe	Phe	Arg	Lys	Glu	Gln	Leu	Glu	Ala	Ala	Ala		
	370					375					380			Ser		
Gln	Lys	Leu	Gly	Leu	Leu	Asp	Arg	Val	Arg	Leu	Ser	Asn	Pro	Arg		
385					390					395				Gly		
Ser	Asn	Thr	Lys	Gly	Lys	Leu	Phe	Thr	Pro	Leu	Asn	Val	Asp	Ala		
				405					410					415		
Glu	Glu	Ser	Pro	Ser	Lys	Glu	Pro	Lys	Pro	Val	Gly	Leu	Asn	Asn		
			420					425					430	Lys		
Glu	Arg	Phe	Arg	Thr	Ala	Phe	Arg	Met	Lys	Ala	Tyr	Ala	Phe	Trp		
		435					440					445		Gln		
Ser	Ser	Glu	Asp	Ala	Gly	Thr	Gly	Asp	Pro	Met	Thr	Glu	Asp	Arg		
		450				455					460			Gly		
Tyr	Gly	Asn	Asp	Phe	Leu	Ile	Glu	Asp	Met	Ile	Pro	Thr	Leu	Lys		
465					470					475				Ala		
Ala	Ile	Arg	Ala	Val	Arg	Ile	Leu	Gln	Phe	Arg	Leu	Tyr	Lys	Lys		
				485					490				495			
Phe	Lys	Glu	Thr	Leu	Arg	Pro	Tyr	Asp	Val	Lys	Asp	Val	Ile	Glu		
			500					505					510	Gln		
Tyr	Ser	Ala	Gly	His	Leu	Asp	Met	Leu	Ser	Arg	Ile	Lys	Tyr	Leu		
		515				520						525		Gln		
Thr	Arg	Ile	Asp	Met	Ile	Phe	Thr	Pro	Gly	Pro	Pro	Ser	Thr	Pro		
						535					540			Lys		

7029.ST25.txt

His 545	Lys	Lys	Ser	Gln	Lys 550	Gly	Ser	Ala	Phe	Thr 555	Tyr	Pro	Ser	Gln	Gln 560
Ser	Pro	Arg	Asn	Glu 565	Pro	Tyr	Val	Ala	Arg 570	Ala	Ala	Thr	Ser	Glu 575	Thr
Glu	Asp	Gln	Ser 580	Met	Met	Gly	Lys	Phe 585	Val	Lys	Val	Glu	Arg 590	Gln	Val
His	Asp 595	Met	Gly	Lys	Lys	Leu	Asp 600	Phe	Leu	Val	Asp 605	Met	His	Met	Gln
His 610	Met	Glu	Arg	Leu	Gln	Val 615	Arg	Val	Thr	Glu	Tyr 620	Tyr	Pro	Thr	Lys
Gly 625	Ala	Ser	Ser	Pro	Ala 630	Glu	Gly	Glu	Lys	Lys 635	Glu	Asp	Asn	Arg	Tyr 640
Ser	Asp	Leu	Lys 645	Thr	Ile	Ile	Cys	Asn 650	Tyr	Ser	Glu	Ser	Gly	Pro 655	Pro
Asp	Pro	Pro	Tyr 660	Ser	Phe	His	Gln	Val 665	Pro	Ile	Asp	Arg 670	Val	Gly	Pro
Tyr	Gly 675	Phe	Phe	Ala	His	Asp 680	Pro	Val	Lys	Leu	Thr	Arg 685	Gly	Gly	Pro
Ser 690	Ser	Thr	Lys	Ala	Gln	Ala 695	Asn	Leu	Pro	Ser	Ser 700	Gly	Ser	Thr	Tyr
Ala 705	Glu	Arg	Pro	Thr	Val 710	Leu	Pro	Ile	Leu	Thr 715	Leu	Leu	Asp	Ser	Cys 720
Val	Ser	Tyr	His 725	Ser	Gln	Thr	Glu	Leu	Gln 730	Gly	Pro	Tyr	Ser	Asp 735	His
Ile	Ser	Pro	Arg 740	Gln	Arg	Arg	Ser	Ile 745	Thr	Arg	Asp	Ser	Asp 750	Thr	Pro
Leu	Ser 755	Leu	Met	Ser	Val	Asn	His 760	Glu	Glu	Leu	Glu 765	Arg	Ser	Pro	Ser
Gly 770	Phe	Ser	Ile	Ser	Gln	Asp 775	Arg	Asp	Asp	Tyr	Val 780	Phe	Gly	Pro	Ser
Gly 785	Gly	Ser	Ser	Trp	Met 790	Arg	Glu	Lys	Arg	Tyr 795	Leu	Ala	Glu	Gly	Glu 800
Thr	Asp	Thr	Asp 805	Thr	Asp	Pro	Phe	Thr	Pro 810	Ser	Gly	Ser	Met	Pro 815	Met

7029.ST25.txt

Ser Ser Thr Gly Asp Gly Ile Ser Asp Ser Ile Trp Thr Pro Ser Asn
 820 825 830

Lys Pro Thr
 835

<210> 8
 <211> 5595
 <212> DNA
 <213> Rattus norvegicus

<400> 8
 ctttcatgat tggttcagta gaatgcaaaa cacctaaggt ttttatggca gtagttgata
 60

aagttgtggt ctgcagacca tccagtttcg atcccttttt gtaaataaag ctttattagg
 120

atagacattt atttacatgt tatctgcagc tgcttttggt accacaggat ggaacaactg
 180

ccccagaagc tataataagg cttattaaag cctatgcagg tgctgcctgg tcttttggtt
 240

aaaaaaaaag tgtatcattt cctgtttttac attaaagata gaattaaatg agaagtctgc
 300

ttgagatggt ttagttttta ctattattaa ggtttggttg acttaaccaa aatcataaaa
 360

aaaaaggaat actattgttt tgtgaacagt gtctgtatat ttaagaata tacaagggaa
 420

atgtatttaa aaagaaaaga gatgaaaaaa caaaagtata cttttctaac attagaacaa
 480

aatgaaaatc ccgcccattg aacaaacttg gtttcaactga ggttctctct gtactaagca
 540

aatgatgttt ggaatgttac attgggacaa atggtgcca agtgatcaga catgtaaagc
 600

agacaaatga aactagcaca caactgtcgg tttccaagga gtgttacggc cgccatcttc
 660

gcaaagccag acacaaactg caaccataac aagccgtggt cataaaggcg aaaactgtgg
 720

cagccacgtt gatgttgtag tggttatcgt tcagtagcgg cttcacaacc atcgtagtgt
 780

tgcattgcag gtcatgcagg gaggtggccg ctgcttccaa taaaaggcg ccgaagtaga

840

agacaaagac tacgaaatgg taggcaaaat ccagaaagtt ccagttggca tcaatctgag
900

tcaccataacc agagaggaac aaaccagga agagaagcga aaagaagaaa gctgtcacag
960

atacaaacat gacccatcct tgcagcagag gtagaggaac attggaagaa gcgacaaaa
1020

tccagacaag tcccccaagt acaatctcca ggcagacgaa aagcttcccg agtaggtcct
1080

caggatgtca gggccagccg gcagggtgat ccggggcgcc gggaaggaca cggcagggtt
1140

cggggcgccg ggactgccgc tccgccggcc gacatgctgc cgctgctacg tctccgcgca
1200

ccgccgccac cgtegccacc gcctcccgcg tcccgctcc gcctcccggg ctgggccgcc
1260

gccgccgccg ccgccgccgc cggcgctccg gttcgcgggg ttcaggcggtg ctgagcgcgg
1320

aaagggtgtg gctacggggc ctctgccgac agagccccgc cccgtcacgt gagcacaggt
1380

gagcggcct ccgccctggc gcccgtcagg gtcaccagcg cagggtgtggt gctccccagc
1440

cgcagccgcc tcggccatgc ggctgccgga cccggggcct gggctggggc ccgcgccacc
1500

ccctgcgcgc cgcccccgct gagccgcgc cggatagggc gccgccggca ccatggtgca
1560

aaagtgcgc aacggtggcg tgtaccccg caccagcggg gaaaaaaagc tcaagggtggg
1620

cttcgtgggg ctggaccccg gcgcgccga ctccactcgc gacggcgcgct tactcatcgc
1680

gggctccgag gcccccaagc gcggcagcgt tttgagcaag ccgcggacgg gcggcgcggg
1740

agccgggaag cccccaaagc gcaacgcctt ctaccgcaag ctgcagaatt tcctatacaa
1800

cgtgctagag cggcccccg gttgggctgt catctaccac gcctacgtgt ttcttttagt
1860

7029.ST25.txt

cttctcctgc cttgtgcttt ccgtgttttc caccatcaag gagtatgaga agagtccga
 1920
 aggggccctc tacatcttgg aaatcgtgac catcgtggta ttcggtgttg agtactttgt
 1980
 gagaatctgg gctgcaggct gctgctgccg gtatcgaggc tggagggggc ggctcaagtt
 2040
 tgccaggaag ccattctgtg tgatcgacat catgggtgctg attgcctcca ttgctgtgct
 2100
 ggctgctggc tcccagggca atgtctttgc tacgtctgca cttcggagct tgcggttctt
 2160
 acaaattctta cggatgatcc gtatggaccg gaggggcggc acctggaagc tcctgggatc
 2220
 ggtgggtctac gctcacagca aggagctggc gactgcgtgg tacattggct tcctctgcct
 2280
 catcctggcc tcgtttctgg tgtacttggc agaaaagggt gagaatgacc acttcgacac
 2340
 ctacgcggat gcactctggc ggggtctgat caccctgaca accattggct acggggacaa
 2400
 gtaccctcag acctggaacg ggaggctgtt agcagcgacg tttaccctca ttgggtgtctc
 2460
 attcttcgct cttcctgctg gcatttttggg atccggcttt gccctgaaag tccaagagca
 2520
 gcatcggcaa aaacactttg agaaacggcg gaatcctgcg gcaggtctga tccagtctgc
 2580
 ctggagattc tatgctacta acctctcag caccgacctg cactccacgt ggcagtacta
 2640
 cgagcggaca gtcactgtcc ccatgatcag ctacaaaact caaacctatg gggcctccag
 2700
 actcattccg cctctgaacc agctggagat gctgaggaat ctcaagagca aatctggact
 2760
 caccttcagg aaggagccac agccagagcc atcaccaagt cagaagggtca gtttgaaaga
 2820
 tcgtgtcttc tccagcccc gaggcgtggc tgccaagggg aaggggtctc cccaggccca
 2880

7029.ST25.txt

gacgggtccgg cgggtccccc gtgcgggatca gagtctcgat gacagcccaa gcaagggtgcc
2940

caagagctgg agctttggtg accgcagccg tgcacgccag gctttccgta tcaagggcgc
3000

tgcaccccg cagaactcag aagaagcaag cctccctggg gaggatatcg tggaggacaa
3060

caagagctgt aactgcgagt ttgtgactga agatcttacc cctggcctca aagtcagcat
3120

cagagctgtg tgtgttatgc ggttcttggg atctaagcga aagttcaaag agagtctgcg
3180

cccatatgac gtgatggatg tcatcgaaca gtactcggcc ggacacttgg atatgttgtc
3240

ccgaatcaag agcctgcagt ccagagtgga ccagattgtg gggcgggggc cgacaataac
3300

ggacaaggac cgcaccaaag gccagcgga gacggaactg cccgaagacc ccagcatgat
3360

gggacgcctt gggaagggtg aaaaacaggt cttgtccatg gaaaagaagc tagacttcct
3420

ggtgagcatc tacacacaga gaatgggcat cccaccagca gagacagagg cctatttcgg
3480

ggccaaggag cctgagccgg caccacccta ccacagcccg gaggacagcc gtgaccatgc
3540

agacaagcat ggctgtatta ttaagattgt ccgctccacc agctctacgg gccagaggaa
3600

atacgccgca cccccagtca tgccccctgc cgagtgtccc ccatccacct cgtggcagca
3660

gagccaccag cgccacggca cctccccctg gggagaccat ggctcactgg tacgcatccc
3720

accaccccct gcgcacgagc gctcactgtc tgccctacagt gggggcaaca gagccagtac
3780

cgagttcttg aggctggagg gcaccccagc ctgcaggccc tctgaggcag ccctgcggga
3840

tagcgacacg tccatctcca tcccttcggt ggaccacgag gagctggagc gttcctttag
3900

cggtttcagt atctcccagt ccaaggagaa cctgaatgcc ctggccagct gttatgcagc

3960

tgtggcgccg tgcgccaagg tcaggcccta cattgcagag ggtgagtctg acacagactc
4020

agacctctgc acaccgtgtg ggccaccccc acgctctgcc actgggtgaag gcccctttgg
4080

agatgtggct tgggcagggc ctaggaagtg attctggggt gggctgctgg ccccatgccca
4140

caccactctt tgttcagttt tagagctgga gttccagggc ctttcttaaa gtgacagagc
4200

ggcatagagt agtgtggggt gtgaggatgc tcatgggatc tcgctctcag ggtcaatgtg
4260

gagtggaaat gaggcagggg tccttagcac atacagtaac attttataga agttcttttc
4320

caaccaggag aggggtgggtg aggccggggc ctgtagggcc ttgggagctc cctatggcag
4380

caaagctagc cctgcctagt cttcttgggg gacatattgc cctgtgagtg aggagggaca
4440

gcgtgatggg tagcctctgt gagtgggggt gtggctggga gcaagtccgt gggaggtagt
4500

ggtgaaatga aacaggcccc tctactgctg atagccagtc ctgaggccca tgggtctctc
4560

agtttagtct gggagctcag gggatatagta agtcactgga aacggcccac tctcacacct
4620

gactgcttat cctccatcc cgactgcccc cagtaaagca ttaccagacc cactgttggg
4680

tgtggctggg caatgcccct catccctggg taacctagct aaagagctgc cacaatcttc
4740

ctccctcttc caggttatgt ggatctttcc atgggaacca tctttaggtc cttctcctgg
4800

agctgaggaa ggagtgaggc ctcagggacc aatctggaac ttagaattga tccttagact
4860

ctcttgactt ccacctctta ggggaagact caactcacag ctttttctga aagggtttct
4920

tcagcagggt ctggctgcct cgtgccaggt actgtagccc agtaggtatg agtcgacact
4980

7029.ST25.txt

tcaaggcctc tgctctttcc tgggtgtggca ctggcctcca ggctgtggcc agcactttaa
5040

gagaatcacc agataagcag accagcctta gccagggcac ctctttgcct gctgcccact
5100

tggctatacg gattcaggca gggctaaatg acatgacgtc ttcaaactgc cggctctctc
5160

tacacgagag catggccttt gagcctggtc aaggatcctt cccaatgaag ctggccatcc
5220

agtcctttat ccaatagtag gtccctggtc tgtggcccct ggggtgtttga ggaattggga
5280

acaccttggc ctctactctg gtgaggaata atccctgtcc atcctgtgag tgggcatctt
5340

gggccatcag cagctgactt tagagggaaa catggtagat ataatagagc cctcggttgt
5400

ggccccataa tatctggccc agaggtgcct ggcattaaat gataacattt tgggggtgggg
5460

gccctaaacc ctcttgccct cagtttttct ggtcactgag gacaagcgct acagagcttg
5520

tgcttggggca gagctttatt tactttcttc acccttttga aatgtgtgtt ctggcagggg
5580

tagaggcaac ttggg
5595

<210> 9
<211> 852
<212> PRT
<213> Rattus norvegicus

<400> 9

Met	Val	Gln	Lys	Ser	Arg	Asn	Gly	Gly	Val	Tyr	Pro	Gly	Thr	Ser	Gly
1				5					10					15	

Glu	Lys	Lys	Leu	Lys	Val	Gly	Phe	Val	Gly	Leu	Asp	Pro	Gly	Ala	Pro
			20					25					30		

Asp	Ser	Thr	Arg	Asp	Gly	Ala	Leu	Leu	Ile	Ala	Gly	Ser	Glu	Ala	Pro
		35					40					45			

Lys	Arg	Gly	Ser	Val	Leu	Ser	Lys	Pro	Arg	Thr	Gly	Gly	Ala	Gly	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

7029.ST25.txt

50					55					60					
Gly 65	Lys	Pro	Pro	Lys	Arg 70	Asn	Ala	Phe	Tyr	Arg 75	Lys	Leu	Gln	Asn	Phe 80
Leu	Tyr	Asn	Val	Leu 85	Glu	Arg	Pro	Arg	Gly 90	Trp	Ala	Phe	Ile	Tyr 95	His
Ala	Tyr	Val	Phe 100	Leu	Leu	Val	Phe	Ser 105	Cys	Leu	Val	Leu	Ser 110	Val	Phe
Ser	Thr	Ile 115	Lys	Glu	Tyr	Glu	Lys 120	Ser	Ser	Glu	Gly	Ala 125	Leu	Tyr	Ile
Leu	Glu 130	Ile	Val	Thr	Ile	Val 135	Val	Phe	Gly	Val	Glu 140	Tyr	Phe	Val	Arg
Ile 145	Trp	Ala	Ala	Gly	Cys 150	Cys	Cys	Arg	Tyr	Arg 155	Gly	Trp	Arg	Gly	Arg 160
Leu	Lys	Phe	Ala	Arg 165	Lys	Pro	Phe	Cys	Val 170	Ile	Asp	Ile	Met	Val 175	Leu
Ile	Ala	Ser	Ile 180	Ala	Val	Leu	Ala	Ala 185	Gly	Ser	Gln	Gly	Asn 190	Val	Phe
Ala	Thr	Ser 195	Ala	Leu	Arg	Ser	Leu 200	Arg	Phe	Leu	Gln	Ile 205	Leu	Arg	Met
Ile 210	Arg	Met	Asp	Arg	Arg	Gly 215	Gly	Thr	Trp	Lys	Leu 220	Leu	Gly	Ser	Val
Val 225	Tyr	Ala	His	Ser	Lys 230	Glu	Leu	Val	Thr	Ala 235	Trp	Tyr	Ile	Gly	Phe 240
Leu	Cys	Leu	Ile	Leu 245	Ala	Ser	Phe	Leu	Val 250	Tyr	Leu	Ala	Glu	Lys 255	Gly
Glu	Asn	Asp	His 260	Phe	Asp	Thr	Tyr	Ala 265	Asp	Ala	Leu	Trp	Trp 270	Gly	Leu
Ile	Thr	Leu 275	Thr	Thr	Ile	Gly	Tyr 280	Gly	Asp	Lys	Tyr	Pro 285	Gln	Thr	Trp
Asn 290	Gly	Arg	Leu	Leu	Ala	Ala 295	Thr	Phe	Thr	Leu	Ile 300	Gly	Val	Ser	Phe
Phe 305	Ala	Leu	Pro	Ala	Gly 310	Ile	Leu	Gly	Ser	Gly 315	Phe	Ala	Leu	Lys	Val 320
Gln	Glu	Gln	His	Arg 325	Gln	Lys	His	Phe	Glu 330	Lys	Arg	Arg	Asn 335	Pro	Ala

7029.ST25.txt

Ala	Gly	Leu	Ile	Gln	Ser	Ala	Trp	Arg	Phe	Tyr	Ala	Thr	Asn	Leu	Ser		
			340					345					350				
Arg	Thr	Asp	Leu	His	Ser	Thr	Trp	Gln	Tyr	Tyr	Glu	Arg	Thr	Val	Thr		
		355					360					365					
Val	Pro	Met	Ile	Ser	Ser	Gln	Thr	Gln	Thr	Tyr	Gly	Ala	Ser	Arg	Leu		
	370					375					380						
Ile	Pro	Pro	Leu	Asn	Gln	Leu	Glu	Met	Leu	Arg	Asn	Leu	Lys	Ser	Lys		
385					390					395					400		
Ser	Gly	Leu	Thr	Phe	Arg	Lys	Glu	Pro	Gln	Pro	Glu	Pro	Ser	Pro	Ser		
				405					410					415			
Gln	Lys	Val	Ser	Leu	Lys	Asp	Arg	Val	Phe	Ser	Ser	Pro	Arg	Gly	Val		
			420					425					430				
Ala	Ala	Lys	Gly	Lys	Gly	Ser	Pro	Gln	Ala	Gln	Thr	Val	Arg	Arg	Ser		
		435					440					445					
Pro	Ser	Ala	Asp	Gln	Ser	Leu	Asp	Asp	Ser	Pro	Ser	Lys	Val	Pro	Lys		
	450					455					460						
Ser	Trp	Ser	Phe	Gly	Asp	Arg	Ser	Arg	Ala	Arg	Gln	Ala	Phe	Arg	Ile		
465					470					475					480		
Lys	Gly	Ala	Ala	Ser	Arg	Gln	Asn	Ser	Glu	Glu	Ala	Ser	Leu	Pro	Gly		
				485					490					495			
Glu	Asp	Ile	Val	Glu	Asp	Asn	Lys	Ser	Cys	Asn	Cys	Glu	Phe	Val	Thr		
			500					505					510				
Glu	Asp	Leu	Thr	Pro	Gly	Leu	Lys	Val	Ser	Ile	Arg	Ala	Val	Cys	Val		
		515					520					525					
Met	Arg	Phe	Leu	Val	Ser	Lys	Arg	Lys	Phe	Lys	Glu	Ser	Leu	Arg	Pro		
	530					535					540						
Tyr	Asp	Val	Met	Asp	Val	Ile	Glu	Gln	Tyr	Ser	Ala	Gly	His	Leu	Asp		
545					550					555					560		
Met	Leu	Ser	Arg	Ile	Lys	Ser	Leu	Gln	Ser	Arg	Val	Asp	Gln	Ile	Val		
				565					570					575			
Gly	Arg	Gly	Pro	Thr	Ile	Thr	Asp	Lys	Asp	Arg	Thr	Lys	Gly	Pro	Ala		
			580					585					590				
Glu	Thr	Glu	Leu	Pro	Glu	Asp	Pro	Ser	Met	Met	Gly	Arg	Leu	Gly	Lys		
		595					600					605					

7029.ST25.txt

Val	Glu	Lys	Gln	Val	Leu	Ser	Met	Glu	Lys	Lys	Leu	Asp	Phe	Leu	Val
610						615					620				
Ser	Ile	Tyr	Thr	Gln	Arg	Met	Gly	Ile	Pro	Pro	Ala	Glu	Thr	Glu	Ala
625					630					635					640
Tyr	Phe	Gly	Ala	Lys	Glu	Pro	Glu	Pro	Ala	Pro	Pro	Tyr	His	Ser	Pro
				645					650					655	
Glu	Asp	Ser	Arg	Asp	His	Ala	Asp	Lys	His	Gly	Cys	Ile	Ile	Lys	Ile
			660					665					670		
Val	Arg	Ser	Thr	Ser	Ser	Thr	Gly	Gln	Arg	Lys	Tyr	Ala	Ala	Pro	Pro
		675					680					685			
Val	Met	Pro	Pro	Ala	Glu	Cys	Pro	Pro	Ser	Thr	Ser	Trp	Gln	Gln	Ser
	690					695					700				
His	Gln	Arg	His	Gly	Thr	Ser	Pro	Val	Gly	Asp	His	Gly	Ser	Leu	Val
705					710					715					720
Arg	Ile	Pro	Pro	Pro	Pro	Ala	His	Glu	Arg	Ser	Leu	Ser	Ala	Tyr	Ser
				725					730					735	
Gly	Gly	Asn	Arg	Ala	Ser	Thr	Glu	Phe	Leu	Arg	Leu	Glu	Gly	Thr	Pro
			740					745					750		
Ala	Cys	Arg	Pro	Ser	Glu	Ala	Ala	Leu	Arg	Asp	Ser	Asp	Thr	Ser	Ile
		755					760					765			
Ser	Ile	Pro	Ser	Val	Asp	His	Glu	Glu	Leu	Glu	Arg	Ser	Phe	Ser	Gly
	770				775						780				
Phe	Ser	Ile	Ser	Gln	Ser	Lys	Glu	Asn	Leu	Asn	Ala	Leu	Ala	Ser	Cys
785					790					795					800
Tyr	Ala	Ala	Val	Ala	Pro	Cys	Ala	Lys	Val	Arg	Pro	Tyr	Ile	Ala	Glu
				805					810					815	
Gly	Glu	Ser	Asp	Thr	Asp	Ser	Asp	Leu	Cys	Thr	Pro	Cys	Gly	Pro	Pro
			820					825					830		
Pro	Arg	Ser	Ala	Thr	Gly	Glu	Gly	Pro	Phe	Gly	Asp	Val	Ala	Trp	Ala
		835					840					845			
Gly	Pro	Arg	Lys												
	850														

<210> 10
 <211> 16
 <212> DNA
 <213> Homo sapiens

<400> 10
 ccccgctgag cctgag
 16

<210> 11
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 11
 tgtaaaaggt cactgccagg
 20

<210> 12
 <211> 19
 <212> DNA
 <213> Rattus norvegicus

<400> 12
 ttgactcccc atccgacct
 19

<210> 13
 <211> 19
 <212> DNA
 <213> Rattus norvegicus

<400> 13
 gcctttgcct tcttttggg
 19

<210> 14
 <211> 16
 <212> DNA
 <213> Rattus norvegicus

<400> 14
 accgcgcaca tgcattg
 16

<210> 15
 <211> 19
 <212> DNA
 <213> Rattus norvegicus

<400> 15

7029.ST25.txt

gtgacatggg gaggaagaa
19